

Abstract

The present invention relates to a method for effecting regulation of the effective noise figure of a CDMA (Code Division Multiple Access) receiver. The regulation process can be used to control the receiver during the activation/deactivation of a cell/sector in a CDMA wireless system and during normal operation when the service area of the cell/sector needs to enlarge or shrink. In a most preferred embodiment the CDMA receiver includes a source of pseudo-random noise that is injected in the received signal, downstream of the signal digitization stage. A power detector measures the power in the received digitized signal and a program logic determines the amount of noise figure degradation to be applied. The actual noise power regulation is effected by multiplying the output of the noise generator by a weighing factor. In a multi-channel CDMA system, each channel is provided with an independent system to regulate the effective noise power figure degradation, thus allowing to effect a noise figure regulation on a channel by channel basis.